

I've known them in the Army. I think the greatest man I ever knew was a VMI graduate, greatest American—that's General [George C.] Marshall.

Q: Yes, sir.

A: Without doubt, he tops them all. He's the greatest man I ever knew, and I think he's the greatest American in my time.

Massachusetts Institute of Technology

Q: I'd like to talk more about him later on and some of the other general officers, the very successful ones. Well, let's see, after you left VMI, you went up to MIT. You did get your degree in one year?

A: Yes.

Q: Your master's in civil engineering?

A: We didn't get master's—we only got bachelors. West Point did not give a B.S. at that time.

Rock Island

Q: Oh, you got bachelor's, I'm sorry. And then you had your, I guess, your second tour, no, this would be your first tour in a district, in the Office of the District Engineer in Rock Island, Illinois.

A: I went there from MIT to Rock Island. My first short period was in Kansas City after the First World War, but that was only a matter of two or three months.

Q: What type of work was the District engaged in at that time; you were there almost two years?

A: Most of it was building some levees. We had a dredge or so. We had very little work; we had very little money. I had charge of rebuilding the

piers of the bridge across the Mississippi River at that time, but that was not under the Corps. The bridge belonged to the Army, and it was under the Rock Island Arsenal, and they asked us to rebuild these piers. They were worried about the structure. That was the main railroad bridge. The Rock Island railroad went across there. It was a highway bridge too, and they were worried about the erosion underwater around these piers. So, we had to cofferdam them off and put a casing of concrete around the pier about 2 feet thick all the way up to the top. That was the principal job I had.

Q: Was that under the civil works program?

A: Yes, but it was paid for, I don't know who, the Rock Island Arsenal paid for it. Some way, they got the money because they owned the bridge. You see, that went from the Rock Island Arsenal island across the Mississippi at that point over to Davenport, Iowa.

Q: But you mentioned the Civil Works function there was rather short of money?

A: Oh, they didn't have much money. We had an inspection boat. Fiddled around with a few levees. I don't know whether—they didn't have much of anything.

Q: Did you have the same interest from the congressmen from Illinois that we have now?

A: Not at that time. I've forgotten what the budget was but it wasn't great and we didn't have a large force.

Q: Did you do most of the work with troop labor or your own labor or did you contract it out?

A: Oh, no, we had hired labor.

Q: Civilians?

A: And most of them were purchase and hire. That is, when I rebuilt the piers it was [with] civilian government labor. There were no soldiers on it except me.

Q: Much the same as it is now, I guess—mostly civilian?

A: It was good experience. I don't think I did a very good job, but I did the best I could with the limited funds. Of course, that's a rock bottom under that part of the Mississippi River so you couldn't drive piling, steel piling, down. You had to put down a cofferdam, a wooden cofferdam around it. I did learn something from that. I had this cofferdam filled with sand around these piers, and then I tried to pump out the inside of the cofferdam to get down to do the work in the dry. You couldn't bring the water down at all because it seeped in so fast that you'd get it down maybe a foot with all the pumps you had, and it wouldn't come down. I was fooling with that and somebody said I'll tell you what you do. Get this fly ash from up here at the Arsenal power plant and take it out there on a barge around the cofferdam and start your pumps. When the pumps just start, begin throwing fly ash on the surface of the water, and the suction pulls it down into the crevices of the small holes. It just worked like a charm. I pulled that water—I'd gotten a dredge one time, trying to add a big pump, oh, about a 30-inch pump on it—and I tried to pull it down without this and I couldn't do anything with that. I put the suction inside and it pumped like hell and it wouldn't come down. But the minute I got the fly ash, I could hold it down with a little 6-inch pump after that.

Q: After you got the fly ash?

A: After the fly ash. But I had to keep the pumps going after that. If you didn't keep it pumped out, then the fly ash would suck out and then you'd have to do it all over again. So you had to keep the pumps going day and night, but I didn't need but a 6-inch, what do you call that pump? It's a common pump that you put down on the bottom. We had one that went on the bottom.

Q: Sump pump or centrifugal pump?

- A: I put one of those in and it would hold it. It would hold the water down and it kept it down and I finally got the thing finished; but I had a hell of a time for a while. It was winter and very cold.
- Q: We had problems like that in Vietnam in building holding tanks for huge storm drains—couldn't stop the water from seeping into the bottom. We had to put raw concrete in, raw cement, to seal it.
- A: Well, you can do the same thing; I mean you can hold it when you want to work in the dry—you can hold it with fly ash—or bentonite is a good thing. We had a leak in the Fort Peck Dam where water began to seep through and they used bentonite; of course, it had the advantage. It goes inside and swells under water.
- Q: Yes, sir, and sets.
- A: And sets. Where the fly ash still had the same flotation. When the pressure got off, the fly ash would all come out. So you had to keep pressure all the time.
- Q: Who gave you the idea to use fly ash, sir, a local contractor?
- A: No, it was a local man and I've forgotten. It wasn't a contractor. I've forgotten who he was; he was an old resident of Rock Island. A friend of mine, I've forgotten his name now, but he was a nice old chap.
- Q: From sources like that I guess we learn an awful lot?
- A: He suggested it; tried that and it worked. It worked like a charm.
- Q: Starting back then and, well, I guess further back than that, there's always been the debate as to whether or not the Civil Works function should remain with the Corps of Engineers, or should it be transferred to the Bureau of Reclamation, Department of the Interior. Did you have any views on that back at that time?

- A: We weren't under pressure in those days, but it wasn't enough money to amount to anything. We didn't really get any pressure on that competition with the Bureau of Reclamation until we got working on those dams up the Missouri River. That was much later.
- Q: There was a lot of money involved in it, but you had no intergovernmental competition at that time.
- A: No intergovernmental competition and nobody objected to it, but the bureau tried to run us out of that work on those dams on the upper Missouri.
- Q: After you left there about January 24, you then had your school instructor assignment?
- A: I went to Fort Belvoir, then it was Humphreys. It was just a little camp. I think the total garrison with the officers and soldiers and everybody else was only about 500 people. They were out there in the woods, almost no road into Alexandria. There was one piece of fairly little concrete but not much. It was way off in the woods, and I taught there for—I think it was until I went to Leavenworth. That was in 1927.
- Q: September 1927. Of course, Fort Humphreys is now Fort Belvoir.
- A: At first when we went down there, it was only an encampment. Later it was declared a permanent post, and then it became Fort Humphreys; but it wasn't any bigger.
- Q: Big health center there now, too, and it's growing a little larger. You had a full three-year tour there at Fort Humphreys?
- A: Yes, I had a hell of a time getting to Leavenworth. I just deviled personnel, man in charge of personnel, Colonel [R. C.] Moore, until he finally threatened to throw me out of the office if I didn't leave him alone. Just about every time I got in Washington, I'd go see Colonel Moore and ask him what my chances were to get to Leavenworth.

Q: Did they have the same type of selection system then that they have now: the branch primarily makes the selection?

A: They were only sending so many. I've forgotten how many were gotten from the Engineers, but we only had about 10 or 12 in the Engineers' outfit .

Q: What did you teach when you were at Humphreys?

A: Military Engineering. I had the Department of Military Engineering.

Q: Now this is getting about seven years after the completion of World War I. The Army had drawn down quite a bit at that time?

A: Oh, yes.

Q: Did you ever have any thoughts of reverting to a civilian career back in those days?

A: Only right after the First World War. I had some offers [from] men who had been temporary officers in the Army, engineers who went back in civil life. I'd known one or two of them. They wrote me and wanted me to go in business with them—contracting and so on. I thought of it at the time because it was out in Rock Island, no, it was in Kansas City and VMI and I don't know, it wasn't very satisfactory. But my wife wouldn't hear of it. She loved the Army and she wanted to stay with it, and I'm glad I did. But I don't know whether I'd have made any more money or not. I might have gone completely broke. I didn't make much money in the Army—I know that. But they did have the Engineer School there. The Engineer School. The Engineer Post had been at Washington Barracks, which is now the National War College.

Q: Fort McNair?

A: Fort McNair. It was then known as Washington Barracks. But they kicked us out of there after the war and we were forced to move down to Belvoir. That was the only place we had to go.

Q: Did Washington Barracks cease to exist then, the city took it over?

A: No, it became the National War College.

Q: Oh, I see. They forced the Engineers out—down to Humphreys.

A: But before that it had been entirely an engineering post. It was the home of the Engineers.

Fort Leavenworth, Again

Q: We got you accepted at Leavenworth. You said you kept asking Colonel Moore. Was he the branch chief or was he your assignment officer?

A: He was in charge of personnel, military personnel.

Q: For the branch?

A: Yes. He later became a major general. He was later G-4 of the Army.

Q: I'll have to look him up. I'm getting some of the names that I want to go back and maybe bring them up on later interviews.

A: I've forgotten his first name. I used to know him very well. He was always a great help when we were in France; he was attached to GHQ and he used to visit us sometimes at regimental headquarters.

Q: Oh, I see. You had known him before?

A: I had known him a little bit.

Q: Did you find that that helped, to know the people in branch throughout your early career?